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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/875,324

06/06/2001

Scott D. Guthrie

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11/17/2006

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EXAMINER

LESNIEWSKI, VICTOR D

ART UNIT

PAPER NUMBER

2152

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/875,324

Applicant(s)

GUTHRIE ET AL.

Examiner

Victor Lesniewski

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 September 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 41, 43-50 and 52-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 41, 43-50 and 52-58 is/are rejected.
- 7) ☒ Claim(s) 43-49 and 52-58 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The amendment filed 9/12/2006 has been placed of record in the file.
2. Claims 41 and 50 have been amended.
3. Claims 42 and 51 have been canceled.
4. Claims 41, 43-50, and 52-58 are now pending.
5. The applicant's arguments with respect to claims 41, 43-50, and 52-58 have been considered but are moot in view of the following new grounds of rejection.

### ***Continued Examination Under 37 CFR 1.114***

6. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous office action has been withdrawn pursuant to 37 CFR 1.114. The applicant's submission filed on 9/12/2006 has been entered.

### ***Claim Objections***

7. Claims 43-49 and 52-58 are objected to because of the following informalities:
  - Claims 43-49 and 52-58 are dependent on a canceled claim. For the purpose of applying prior art it will be assumed that claims 43 and 47 depend on claim 41 and that claims 52 and 56 depend on claim 50.

Appropriate correction is required.

***Claim Rejections - 35 USC § 101***

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 50 and 52-58 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 50 and 52-58 recite descriptive material that may or may not be an embodiment of a computer system or embodied on a computer readable medium so as to be executable. Here, “a computer program data product” does not constitute eligible subject matter for patentability. See MPEP 2106.IV.B.1.

10. The applicant’s specification defines computer readable media in terms of both statutory and non-statutory embodiments. See the specification, page 27, line 11 through page 28, line 6. The “communication media” embodiment is considered non-statutory as a signal encoded with functional descriptive material does not fall within any of the categories of patentable subject matter set forth in 35 U.S.C. 101. A claim that can be read so broadly as to include statutory and non-statutory subject matter must be amended to limit the claim to a practical application.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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12. Claims 41, 43-47, 50, and 52-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts et al. (U.S. Patent Number 6,792,605), hereinafter referred to as Roberts.

13. Roberts has disclosed a method for providing web services using an XML runtime model that utilizes data exchange schema data corresponding to remote services. However, concerning claims 41 and 50, Roberts is not explicit about the same order of the steps as claimed.

Specifically, Roberts did not explicitly state storing the data exchange schema data within the web services library at the same time that the generated processing object is stored. It is unclear when exactly the system of Roberts stores the schema data as it appears that the schema data is present in the web services architecture once the service is published. However, the system still stores the schema data and it is in direct relation to the processing object. See Roberts, column 5, lines 62-67. Since the schema data is already stored at the time of storing the processing object, it would have been obvious to simply store the schema data later when storing the processing object, or restore the schema data with the data processing object. Thus, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Roberts by adding the ability to store the data exchange schema data within the web services library at the same time that the generated processing object is stored. This satisfies the need for flexible network storage paradigms which are well known in the art in order to effectuate advanced processing techniques over networked devices.

14. Some claims will be discussed together. Those claims which are essentially the same except that they set forth the claimed invention as a computer program data product are rejected under the same rationale applied to the described claim.

15. Thereby, Roberts discloses:

- <Claims 41 and 50>

A method, executed in a computer system, for automatically creating data exchange schema data on a network server corresponding to remote processing services provided by the network server for source code corresponding to data processing objects used to provide the remote processing services upon receipt of a request from a client, the method comprising: storing a source code file within the mass storage of the server (Roberts, column 4, lines 41-45); receiving a processing service request (Roberts, column 6, lines 23-27); determining the processing service to be performed by examining one or more items of payload data in the processing service request (Roberts, column 6, lines 28-33); compiling the source code file to generate a data processing object, the data processing object providing the requested processing service (Roberts, column 7, lines 11-29); automatically generating the data exchange schema data that specifies how to exchange data between the server and the client for the data processing object, the data exchange schema data generated when the source code file is compiled to generate the data processing object, the data exchange schema data being a separate description from the data processing object (Roberts, column 7, lines 12-15 and column 8, lines 30-47); storing the data exchange schema data and the data processing object within the web services library for use by subsequent processing service requests (Roberts, column 5, line 62 through column 6, line 10 and obviousness as discussed above); receiving a subsequent processing service request for a subsequent client (Roberts, column 10, line 53 through column 11, line 6); determining if a compiled version of the data processing

object is stored in the web services library (Roberts, column 10, line 53 through column 11, line 6); if the data processing object is stored in the web services library, separately providing the data exchange schema data to the subsequent client, the subsequent client determining format and function of input and output arguments of the data processing object from the data exchange schema data (Roberts, column 13, lines 9-19); receiving subsequent payload data for the data processing object, the subsequent payload data received in accordance with the data exchange schema data (Roberts, column 13, lines 26-41); and in response to receiving the subsequent payload data, providing the requested processing service to the subsequent client (Roberts, column 13, lines 26-41).

- <Claims 43 and 52>

The method according to claim 42, wherein data exchange schema data comprises an HTML representation for a web page containing a description of exposed data processing services (Roberts, column 5, lines 38-43).

- <Claims 44 and 53>

The method according to claim 43, wherein the web page comprises: a textual description of each exposed data processing service based upon data stored within the source code file; a description of each input argument accepted by each exposed data processing service, the description includes a description of the input argument and a description of the data format for the input argument data expected by the exposed data processing service; and a description of each output data value generated by each exposed data processing service (Roberts, column 11, lines 42-63 and column 12, lines 22-29).

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- <Claims 45 and 54>

The method according to claim 44, wherein the description of each input argument further comprises an input field upon the generated web page for permitting a user to input a value to be passed to the exposed data processing service as the corresponding input argument (Roberts, column 13, lines 32-41).

- <Claims 46 and 55>

The method according to claim 45, wherein the description of each output data value generated by each exposed data processing service further comprises an activate button which causes the remote data processing service to be activated using the values contained within the input fields corresponding to the input arguments as the input arguments submitted with the remote data processing service request (Roberts, column 13, lines 1-8).

- <Claims 47 and 56>

The method according to claim 42, wherein the data exchange schema data comprises a specification for the input and output data schema expressed in a data transfer specification language (Roberts, column 8, lines 15-47).

Since Roberts discloses all of the above limitations, claims 41, 43-47, 50, and 52-56 are rejected.

16. Claims 48 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts, as applied above, further in view of W3C's "Web Services Description Language (WSDL) 1.1," dated 3/15/2001, hereinafter referred to as WSDL.



17. Roberts disclosed a method for providing web services using an XML runtime model that utilizes data exchange schema data corresponding to remote services. In an analogous art, WSDL disclosed a description of WSDL, Web Services Description Language, a type of data exchange description language for web services. Roberts also states W3C compliance for his schema data (see Roberts, column 8, lines 30-47) and WSDL is set forth by the W3C for the same type of network uses.

18. Concerning claims 48 and 57, Roberts did not explicitly state the data transfer specification language comprising a Web Services Description Language representation. However, WSDL does explicitly disclose the use of Web Services Description Language in a system such as the system of Roberts for describing network services. Web Services Description Language would have been a clear alternative for a description language for one of ordinary skill in the art in this type of system. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify Roberts by adding the ability for the data transfer specification language to comprise a Web Services Description Language representation as provided by WSDL. Here the combination satisfies the need for the efficient creation of custom applications that dynamically invoke and interconnect a combination of web services and configure themselves in customized formats at runtime. See Roberts, column 3, lines 15-19.

19. Thereby, the combination of Roberts and WSDL discloses:

- <Claims 48 and 57>

The method according to claim 47, wherein the data transfer specification language comprises a Web Services Description Language representation for the data exchange schema data (WSDL, page 1, Abstract).

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Since the combination of Roberts and WSDL discloses all of the above limitations, claims 48 and 57 are rejected.

20. Claims 49 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roberts, as applied above, further in view of W3C's "Metadata Activity Statement," dated 5/8/2000, hereinafter referred to as W3C.

21. Roberts disclosed a method for providing web services using an XML runtime model that utilizes data exchange schema data corresponding to remote services. In an analogous art, W3C disclosed a description of RDF, Resource Description Framework, a type of data exchange description language for web services. Roberts also states W3C compliance for his schema data (see Roberts, column 8, lines 30-47) and RDF is set forth by the W3C for the same type of network uses.

22. Concerning claims 49 and 58, Roberts did not explicitly state the data transfer specification language comprising a Resource Description Format representation. However, W3C does explicitly disclose the use of RDF schemas in a system such as the system of Roberts for describing network services. RDF would have been a clear alternative for a description language for one of ordinary skill in the art in this type of system. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify Roberts by adding the ability for the data transfer specification language to comprise a Resource Description Format representation as provided by W3C. Here the combination satisfies the need for the efficient creation of custom applications that dynamically invoke and interconnect a combination

of web services and configure themselves in customized formats at runtime. See Roberts, column 3, lines 15-19.

23. Thereby, the combination of Roberts and W3C discloses:

- <Claims 49 and 58>

The method according to claim 47, wherein the data transfer specification language comprises a Resource Description Format representation for the data exchange schema data (W3C, page 3, the first two paragraphs).

Since the combination of Roberts and W3C discloses all of the above limitations, claims 49 and 58 are rejected.

### *Conclusion*

24. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure.

- Slaughter et al. (U.S. Patent Number 6,950,875) disclosed message conductors that can accept a data representation language schema that describes the ordering for messages that may be sent between a client and a service.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor Lesniewski whose telephone number is 571-272-3987.

The examiner can normally be reached on Monday through Thursday.

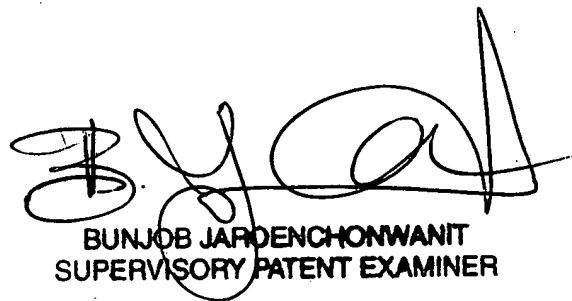
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Victor Lesniewski  
Patent Examiner  
Group Art Unit 2152



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